Liberating Trapped Cash: 
A Case Study of Trapped Cash at Apple and Microsoft

Russell Engel
Southern Connecticut State University

Bridget Lyons
Sacred Heart University

Danny Pannese
Sacred Heart University

Abstract

The topic of trapped cash, or cash permanently reinvested overseas to avoid tax upon repatriation, has become a hot topic in accounting, finance and policy circles over the past five years. This case study considers trapped cash at two major technology firms, Microsoft and Apple. The case can be used to initiate a discussion of the origination and financial reporting of overseas cash and alternative uses of this cash. The focus is to examine the reporting of cash balances and related tax impacts and to identify and evaluate the strategies utilized by Microsoft and Apple to manage offshore cash.

Case Context

In the fall of 2014 you were hired by Nancy Paxton, Senior Director of Investor Relations at Apple. An important part of your role is to collect and analyze information on permanently reinvested earnings and so called “trapped cash” in order to better respond to shareholder questions and inform political requests and potential future hearings. Today is October 9, 2014 and your role has gained urgency following a just released letter sent from Carl Icahn in which he makes a push for utilizing Apple’s vast cash balances to repurchase stock in a strategy he claims will enhance shareholder value. Ms. Paxton has asked you to prepare background materials for a response with a particular focus on comparing and contrasting Apple and Microsoft in terms of cash balances, cash held outside the United States and use of cash over the past five years.

Nancy Paxton has just forwarded the recently released letter sent from Carl Icahn. This letter follows a previous open letter issued in January. The letters are excerpted below and the full text of the letters is available in Appendix 3.

From October 2014 letter:

“You have said before that the company likes to be “opportunistic” when repurchasing shares and we appreciate that. With this letter we simply hope to express to you that now is a very opportunistic time to do so. We think a tender offer is simply a good method of conducting a large repurchase in an expedited timeframe, but the exact method and the exact size is not the key issue for us. We are simply asking you to help us convince the board to repurchase a lot more, and sooner. We feel
compelled to do so because we forecast such impressive earnings growth over the next few years, and therefore we believe Apple is dramatically undervalued in today’s market, and the more shares repurchased now, the more each remaining shareholder will benefit from that earnings growth.”

From January 2014 letter:

“In our opinion, a great example of a “no brainer” in today’s market is Apple. The S&P 500’s price to earnings multiple is 71% higher than Apple’s, and if Apple were simply valued at the same multiple, its share price would be $840, which is 52% higher than its current price. This is a dramatic valuation disconnect that simply makes no sense to us, and it seems that the company agrees with us on this point. Tim Cook himself has expressed on more than one occasion that Apple is undervalued, and as the company states, it already has in place “the largest share repurchase authorization in history.” We believe, however, that this share repurchase authorization can and should be even larger…”

“When compared to its next largest competitor, Microsoft, for example, Apple has $68 billion more net cash and is expected to generate $18 billion more in earnings during 2014.

The Board may argue that much of its cash and earnings are international and therefore subject to a repatriation tax if returned to the United States to repurchase shares. While this is true, we question why the company would not simply borrow the money in the United States to the extent it deems its domestic cash of $36 billion and domestic earnings are insufficient. Given that the company has $130 billion of net cash and $40 billion of expected annual earnings, and the fact that it is hard to find a better time in history to borrow money, a $50 billion share repurchase over the course of fiscal year 2014 seems more than reasonable to us. Today, Apple’s outstanding ten year bonds yield 3.63%, and its five year bonds yield 2%. Apple could either continue to carry this debt, repay it from its domestic earnings over time, or repatriate cash from abroad upon the passage of corporate tax reform.”

You just left a meeting with Nancy and senior finance executives called to discuss next steps. The group believes Apple needs a response to the letter from Icahn as well as recent political hearings and public outcry over “tax avoidance”. While all believe the firm needs to respond, views differ on recommended next steps. One view is that Apple’s stock price has risen dramatically over the past 18 months in part based upon the firm’s strategies aimed at managing global taxes while refining the capital structure through debt issuances and share repurchases. Others agree with Icahn that the firm’s excess liquidity may be contributing to depressed share valuation.

This letter follows a host of tweets Mr. Icahn posted earlier in the year. Icahn’s call to issue debt to free up cash to buy back shares of Apple stock is not the only such request. Last year, David Einhorn, founder of Greenlight Capital initiated legal proceedings against Apple in order to get Apple to issue a dividend. The term, free up cash has particular significance because despite being cash rich, Apple has listed most of its cash as being permanently reinvested overseas. This language is derivative of FASB ASC 740. ASC 740-30-25-17 includes guidance on the evidence needed for a parent entity to assert that undistributed earnings are invested indefinitely in order to avoid the repatriation tax. So while it is true that Apple has a lot of cash, this cash is “trapped” overseas. It is also worth noting that the former CEO, Steve Jobs, was against both issuing debt and paying dividends and these views are still held by some significant shareholders.

Task 1

You have been asked to analyze the issue of permanently reinvested earnings and trapped cash with a particular emphasis on comparing Apple to Microsoft in terms of use of foreign cash holdings and disclosure of cash and permanently reinvested earnings. Microsoft has been singled out based on the firm’s similar cash situation, geographic and business profile and as well because the firm has already testified before the Senate.
1. Summarize for non-sophisticated investors the “trapped cash” issue
2. Examine the financial statements of Apple and Microsoft over the last five years and summarize reporting by each firm of:
   i. Cash, cash held outside the U.S. and permanently reinvested earnings
   ii. any potential tax implications
3. Compare how each firm utilized excess cash (i.e. not core business uses such as capital expenditures or investment in working capital) over the past three years
4. Analyze the pros and cons of Icahn’s push for accelerated share repurchases

Task 2

Compounding the situation is the “invitation” sent by the Permanent Subcommittee on Investigations. Carl Levin has already had executives from Microsoft in to testify about their overseas earnings specifically regarding FASB ASC 740-30-25. Microsoft has already faced questions about their cash stockpile as far back as 2002 from consumer activist Ralph Nader. He thought Microsoft should have to pay the Accumulated Earnings Tax:

   “Microsoft's cash balance of $36 billion should be subject to a little-known part of the federal tax code called the "accumulated earnings tax." That tax was designed to prevent companies and their officers from accumulating excess cash as a way of avoiding dividend payouts and subsequent taxes. "It's a tax-avoidance scheme for the big shareholders," Mr. Nader said in an interview. He added: "This thing is out of control. Has any company in history ever accumulated so much cash?"1

These new questions come not about the size of cash in general but the alleged tax avoidance associated with this overseas cash.

1. Compute the reasonable needs of Microsoft and Apple using the Bardahl formula.
2. Do you think these companies are subject to the Accumulated Earnings Tax?

Information relevant to the tasks is provided in the following appendices.
Appendix 1: Background on trapped cash
Appendix 2: Information on case firms
Appendix 3: Letters from Carl Icahn
Appendix 4: Timeline
Appendix 5: Bardahl formula for reasonable cash needs
Appendix 6: Financial information in attached Excel file or students can pull 10Ks

1 http://www.wsj.com/news/articles/SB1010359428628772440
Appendix 1: Background on Trapped Cash

So called “trapped cash” refers to cash and liquid investments held by subsidiaries located outside the United States. Firms with overseas subsidiaries located in jurisdictions where the tax rate is lower than the rates in the US can reduce taxes by attributing profits to foreign locales but bringing the cash back to the US subjects the funds to the US corporate tax rate, less credit for foreign income taxes paid. This issue has been particularly important in the technology sector since firms in the sector have recently amassed high cash levels from overseas operations. At the time of this case, the top 10 US technology firms held over $400 billion in cash with about 60% held outside the US.

In principle, the United States follows a worldwide taxation system. This means that income earned by foreign subsidiaries of US headquartered firms is taxable upon repatriation. If the earnings are to be repatriated at a later date, this fact must be recognized in the financial statements as a deferred tax liability. The tax rate owed in the US is offset by the tax rate paid in the foreign locale. This differs from what is called a territorial tax system. In a territorial tax system, income earned by a foreign subsidiary is taxable where earned and not subject to tax upon repatriation.

The current rule (ASC 740-30-25-3) states that “there is a presumption that all undistributed earnings of a subsidiary will be transferred to the parent entity and that an entity must have specific, definite plans to overcome this presumption”. In practice, things become more interesting. Further along in the codification we see that ASC 740-30-25-18 states “a deferred tax liability is not recognized for undistributed earnings in a foreign subsidiary that is essentially permanent in duration”. So, as long as a company stated that it will not be repatriating its foreign earnings, the company does not need to recognize a deferred tax liability.

Appendix 2: Information on Case Firms

Apple Inc. and Microsoft are two of the largest technology companies in the world by market capitalization. They are historically linked and the relationship of their respective founders, Steve Jobs and Bill Gates, was chronicled in the film “The Pirates of Silicon Valley.” While Microsoft’s success has been relatively linear, Apple was close to bankruptcy in 1997. Today both companies find themselves flush with cash. Microsoft’s success continues to come from its Windows operating system and its Office Suite software. Apple’s return to glory began with the iMac and has continued with the release of the iPod, iTunes, the iPad and most notably the iPhone.

Popular press stories often report the financial success of Apple and Microsoft in terms of their cash stockpile. The press often homes in on the fact that much of this cash is held overseas and out of the reach of taxation by the United States government. For example, this quote is taken from a March 12, 2014 story in Bloomberg (http://www.bloomberg.com/news/2014-03-12/cash-abroad-rises-206-billion-as-apple-to-ibm-avoid-tax.html):

“In three years, Microsoft’s profits held offshore have more than doubled and Apple’s have more than quadrupled. … The companies and their critics say the growing stockpiles are symbols of a broken U.S. tax system, for which they offer sharply divergent solutions.”

These press stories and the underlying fact, that billions of dollars in corporate profits are out of the reach of taxation, does not sit well with certain members of Congress. Senator Carl Levin has held multiple hearings on overseas profits and has had executives from Microsoft before his committee to testify. (Note: By this date executives from both Apple and Microsoft have testified but the case task is written assuming that Apple has not yet testified and needs to prepare to give testimony.)

Senator Levin is not the only person who has an interest in this cash stockpile. Activist investors Carl Icahn and David Einhorn have been issuing statements in the press trying to sway Apple to buy back shares. Einhorn went as far as to file suit against Apple (the suit was later dropped).

Hedge fund billionaire David Einhorn is suing Apple to force the company to return more of its $137bn cash pile to shareholders.
Einhorn, whose Greenlight Capital hedge fund owns 1.3m Apple shares – 0.12% of the company, said the iPhone and iPad maker has a "cash problem" that it should solve by paying out more to investors.²

Appendix 3: Letters from Carl Icahn

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<th>January 2014 Letter from Carl Icahn to Shareholders</th>
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<table>
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<tr>
<th>October 2014 Letter from Carl Icahn to Tim Cook</th>
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## Appendix 4: Timeline

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<th>Date</th>
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<tbody>
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<td>5/10/2011</td>
<td>Microsoft buys Skype with overseas cash.</td>
</tr>
<tr>
<td>10/26/2011</td>
<td>Rep. David Camp (R-Michigan, chair of the House Committee on Ways and Means) releases &quot;International Tax Reform&quot; discussion draft which proposes a shift from a worldwide system of taxation to a territorial-based system that exempts 95% of overseas earnings from U.S. taxation when profits are brought back to the United States from a foreign subsidiary.</td>
</tr>
<tr>
<td>11/17/2011</td>
<td>House Committee on Ways and Means holds a hearing on Camp's discussion draft</td>
</tr>
<tr>
<td>9/20/2012</td>
<td>The Permanent Subcommittee on Investigations holds a hearing, &quot;Offshore Profit Shifting and the U.S. Tax Code.&quot; Representatives from Hewlett-Packard and Microsoft were called to testify.</td>
</tr>
<tr>
<td>2/7/2013</td>
<td>David Einhorn, president of Greenlight Capital, files suit against Apple Inc.</td>
</tr>
<tr>
<td>3/1/2013</td>
<td>Einhorn drops suit against Apple Inc.</td>
</tr>
<tr>
<td>4/30/2013</td>
<td>Apple issues a bond offering ($17 Billion).</td>
</tr>
<tr>
<td>5/21/2013</td>
<td>The Permanent Subcommittee on Investigations holds Part 2 of &quot;Offshore Profit Shifting and the U.S. Tax Code.&quot; Representatives from Apple Inc. were called to testify.</td>
</tr>
<tr>
<td>6/13/2013</td>
<td>House Committee on Ways and Means holds a hearing on tax reform: &quot;Tax Havens, Base Erosion and Profit Shifting.&quot;</td>
</tr>
<tr>
<td>1/23/2014</td>
<td>Carl Icahn's first open letter to Tim Cook, Apple CEO, is issued.</td>
</tr>
<tr>
<td>4/28/2014</td>
<td>Apple issues another bond offering ($17 Billion) and a share repurchase program.</td>
</tr>
<tr>
<td>10/9/2014</td>
<td>Carl Icahn's second letter to Tim Cook, Apple CEO, is issued.</td>
</tr>
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Appendix 5: Bardahl Formula for Reasonable Cash Needs

In Bardahl Manufacturing v. the Commissioner, the government established a formula to prevent corporations from unreasonably accumulating earnings instead of paying the earnings out in the form of a dividend. The formula is stated as follows:

\[(\text{Inventory turnover} + \text{Accounts Receivable Turnover} - \text{Accounts Payable Turnover}) \times \text{Operating Expenses} = \text{Reasonable Working Capital Needs}\]

There must be nexus between the Corporation’s want to accumulated earnings and profits and its need. It must be for what the Corporation determines to be reasonable needs, which is a matter of facts and circumstances. Treasury Regulations 1.537-2 cites examples of what constitutes reasonable needs:

1. Product liability loss reserve.
2. Distributions in redemption of stock
3. Business expansion and plant replacement
4. Acquisition of a business through purchase
5. Retirement of debt
6. Additional working capital
7. Investments or loans to suppliers or customers

Treasury Regulations §1.537-1 further states,

“An accumulation of earnings and profits is in excess of the reasonable needs of the business if it exceeds the amount that a prudent businessman would consider to be appropriate for the present business purposes and for the reasonably anticipated future needs of the business.”

In short, once we determine what the reasonable needs of the business are, anything in excess is considered unreasonable unless it can be documented. Any unreasonable accumulation is subject to a penalty tax of twenty per cent in accordance with Internal Revenue Code Section §53.

Appendix 6– Financial Information on Apple and Microsoft

See attached Excel file or can be included
Teaching Note

This teaching note outlines an approach to facilitate dialogue on the issue of trapped cash and permanently reinvested earnings using the questions posed within the case. We restate the questions, identify where relevant information can be found in the appendix and provide a possible response to the question.

**Task 1.1: Summarize for non-sophisticated investors the “trapped cash” issue**

When US firms have overseas subsidiaries located in jurisdictions where the tax rate is lower than the rates in the US, those subsidiaries can pay the lower tax rate BUT if cash from the overseas subsidiary is brought back into the US it will be taxed at US corporate tax rate, less credit for foreign income taxes paid. This creates an incentive for such firms to leave the cash and liquid investments outside the US leading to “trapped cash”.

As revenue growth has slowed at major US technology firms, the combination of fairly stable earnings and fewer investment opportunities has resulted in increasingly large cash balances at prominent U.S. based technology firms. At these firms, a significant portion of earnings generated relate to the operations of foreign subsidiaries. As overseas earnings have grown, so have foreign held cash balances. At 12/31/2013 Apple, Microsoft, Google, Cisco and Oracle had a combined $386 billion in cash; almost $310 billion of this was held outside the U.S. For perspective, note that combined net income reported by these five firms totaled $92 billion in 2013.

**Additional information:**

- Grant Thornton New Developments Summary. Earnings in foreign subsidiaries. U.S. income tax implications under ASC 740

- APB 23: Accounting for Income Taxes –Special Areas


**Task 1.2 Examine the financial statements of Microsoft and Apple for the past 5 years and identify the reporting of cash, cash held outside the US and permanently reinvested earnings**

i. Examine the financial statements of Apple and Microsoft over the last five years and summarize reporting by each firm of:
   a. Cash, cash held outside the U.S. and permanently reinvested earnings
   b. any potential tax implications
   c.

**Information to use:**

- 2014 Balance Sheet for each company
- Note disclosures

*The Accounting Educators’ Journal, 2016*
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- The table below that summarizes cash and overseas cash

While the information provided below is sufficient to answer the questions and motivate discussion, the instructor can enhance the discussion by using the SEC’s Edgar website:

http://www.sec.gov/edgar/searchedgar/webusers.htm#./VPlqbPnF_T8

The instructor can search for Microsoft or Apple on the site and pull up the company’s interactive 10-k.

<table>
<thead>
<tr>
<th></th>
<th>Apple</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>2014</td>
<td>2013</td>
<td>2012</td>
<td>2011</td>
<td>2010</td>
</tr>
<tr>
<td>Total Cash</td>
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<td>$146.76</td>
<td>$121.25</td>
<td>$81.57</td>
<td>$51.01</td>
</tr>
<tr>
<td>Cash Outside of U.S</td>
<td>$137.10</td>
<td>$111.30</td>
<td>$82.60</td>
<td>$54.30</td>
<td>$30.80</td>
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<th>Microsoft</th>
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<tbody>
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<td>2014</td>
<td>2013</td>
<td>2012</td>
<td>2011</td>
<td>2010</td>
</tr>
<tr>
<td>Total Cash</td>
<td>$85.71</td>
<td>$77.02</td>
<td>$63.04</td>
<td>$52.77</td>
<td>$36.79</td>
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<tr>
<td>Permanently Reinvested Earnings Outside of U.S</td>
<td>$92.90</td>
<td>$76.40</td>
<td>$60.80</td>
<td>$44.80</td>
<td>$29.50</td>
</tr>
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</table>

**Definition of cash**

The first issue that needs to be addressed is the definition of cash. For the purpose of this answer, the instructor should take a broad view of cash. This broad view sets cash as: Cash and Cash Equivalents plus short term marketable securities plus long term marketable securities. The instructor can use this as a teachable moment to point out the GAAP definition of cash is not necessarily the same definition external users apply, in practice, when they are looking at a company’s balance sheet.

**Location of cash**

The second issue to address is where the cash is. A key point here is that cash held outside is non-trivial to determine. You can see this by looking at the difference in Apple and Microsoft’s note disclosure. While Apple writes:

“As of September 27, 2014 and September 28, 2013, $137.1 billion and $111.3 billion, respectively, of the Company’s cash, cash equivalents and marketable securities were held by foreign subsidiaries and are generally based in U.S. dollar-denominated holdings.”

Microsoft writes:

“As of June 30, 2014, we have not provided deferred U.S. income taxes or foreign withholding taxes on temporary differences of approximately $92.9 billion resulting from earnings for certain non-U.S. subsidiaries which are permanently reinvested outside the U.S.”

Apple is specific in stating its foreign cash, Microsoft only speaks of its “permanently reinvested earnings.” This is more than a simple semantic issue because Microsoft is reporting permanently reinvested earnings that are greater
than its total cash holdings (see Table above). This is perfectly reasonable but it is less transparent than the disclosure supplied by Apple.

*A key take-away is that just as cash and retained earnings are quite different, cash and permanently reinvested earnings are distinct despite journalistic entries confusing the two.*

### Note Disclosures on Permanently Reinvested Earnings

The firms provide different information related to cash held outside the U.S., permanently reinvested earnings and tax implications.

**MSFT**

2014: As of June 30, 2014, we have not provided deferred U.S. income taxes or foreign withholding taxes on temporary differences of approximately $92.9 billion resulting from earnings for certain non-U.S. subsidiaries which are permanently reinvested outside the U.S. The unrecognized deferred tax liability associated with these temporary differences was approximately $29.6 billion at June 30, 2014.

2013: As of June 30, 2013, we have not provided deferred U.S. income taxes or foreign withholding taxes on temporary differences of approximately $76.4 billion resulting from earnings for certain non-U.S. subsidiaries which are permanently reinvested outside the U.S. The unrecognized deferred tax liability associated with these temporary differences was approximately $24.4 billion at June 30, 2013.

2012: As of June 30, 2012, we have not provided deferred U.S. income taxes or foreign withholding taxes on temporary differences of approximately $60.8 billion resulting from earnings for certain non-U.S. subsidiaries which are permanently reinvested outside the U.S. The unrecognized deferred tax liability associated with these temporary differences was approximately $19.4 billion at June 30, 2012.

2011: We have not provided deferred U.S. income taxes or foreign withholding taxes on temporary differences of approximately $44.8 billion resulting from earnings for certain non-U.S. subsidiaries which are permanently reinvested outside the U.S. The unrecognized deferred tax liability associated with these temporary differences is approximately $14.2 billion.

2010: We have not provided deferred U.S. income taxes or foreign withholding taxes on temporary differences of approximately $29.5 billion resulting from earnings for certain non-U.S. subsidiaries which are permanently reinvested outside the U.S. The unrecognized deferred tax liability associated with these temporary differences is approximately $9.2 billion.

**AAPL**

2014: The foreign provision for income taxes is based on foreign pre-tax earnings of $33.6 billion, $30.5 billion and $36.8 billion in 2014, 2013 and 2012, respectively. The Company’s consolidated financial statements provide for any related tax liability on undistributed earnings that the Company does not intend to be indefinitely reinvested outside the U.S. Substantially all of the Company’s undistributed international earnings intended to be indefinitely reinvested in operations outside the U.S. were generated by subsidiaries organized in Ireland, which has a statutory tax rate of 12.5%. As of September 27, 2014, U.S. income taxes have not been provided on a cumulative total of $69.7 billion of such earnings. The amount of unrecognized deferred tax liability related to these temporary differences is estimated to be approximately $23.3 billion.

As of September 27, 2014 and September 28, 2013, $137.1 billion and $111.3 billion, respectively, of the Company’s cash, cash equivalents and marketable securities were held by foreign subsidiaries and are generally based in U.S. dollar-denominated holdings. Amounts held by foreign subsidiaries are generally subject to U.S. income taxation on repatriation to the U.S.
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2013: The foreign provision for income taxes is based on foreign pre-tax earnings of $30.5 billion, $36.8 billion and $24.0 billion in 2013, 2012 and 2011, respectively. The Company’s consolidated financial statements provide for any related tax liability on undistributed earnings that the Company does not intend to be indefinitely reinvested outside the U.S. Substantially all of the Company’s undistributed international earnings intended to be indefinitely reinvested in operations outside the U.S. were generated by subsidiaries organized in Ireland, which has a statutory tax rate of 12.5%. As of September 28, 2013, U.S. income taxes have not been provided on a cumulative total of $54.4 billion of such earnings. The amount of unrecognized deferred tax liability related to these temporary differences is estimated to be approximately $18.4 billion.

As of September 28, 2013 and September 29, 2012, $111.3 billion and $82.6 billion, respectively, of the Company’s cash, cash equivalents and marketable securities were held by foreign subsidiaries and are generally based in U.S. dollar-denominated holdings. Amounts held by foreign subsidiaries are generally subject to U.S. income taxation on repatriation to the U.S.

2012: The foreign provision for income taxes is based on foreign pretax earnings of $36.8 billion, $24.0 billion and $13.0 billion in 2012, 2011 and 2010, respectively. The Company’s consolidated financial statements provide for any related tax liability on amounts that may be repatriated, aside from undistributed earnings of certain of the Company’s foreign subsidiaries that are intended to be indefinitely reinvested in operations outside the U.S. As of September 29, 2012, U.S. income taxes have not been provided on a cumulative total of $40.4 billion of such earnings. The amount of unrecognized deferred tax liability related to these temporary differences is estimated to be approximately $13.8 billion.

As of September 29, 2012 and September 24, 2011, $82.6 billion and $54.3 billion, respectively, of the Company’s cash, cash equivalents and marketable securities were held by foreign subsidiaries and are generally based in U.S. dollar-denominated holdings. Amounts held by foreign subsidiaries are generally subject to U.S. income taxation on repatriation to the U.S.

2011: The foreign provision for income taxes is based on foreign pretax earnings of $24.0 billion, $13.0 billion and $6.6 billion in 2011, 2010 and 2009, respectively. The Company’s consolidated financial statements provide for any related tax liability on amounts that may be repatriated, aside from undistributed earnings of certain of the Company’s foreign subsidiaries that are intended to be indefinitely reinvested in operations outside the U.S. As of September 24, 2011, U.S. income taxes have not been provided on a cumulative total of $23.4 billion of such earnings. The amount of unrecognized deferred tax liability related to these temporary differences is estimated to be approximately $8.0 billion.

As of September 24, 2011 and September 25, 2010, $54.3 billion and $30.8 billion, respectively, of the Company’s cash, cash equivalents and marketable securities were held by foreign subsidiaries and are generally based in U.S. dollar-denominated holdings. Amounts held by foreign subsidiaries are generally subject to U.S. income taxation on repatriation to the U.S.

2010: The foreign provision for income taxes is based on foreign pretax earnings of $13.0 billion, $6.6 billion and $4.6 billion in 2010, 2009 and 2008, respectively. The Company’s consolidated financial statements provide for any related tax liability on amounts that may be repatriated, aside from undistributed earnings of certain of the Company’s foreign subsidiaries that are intended to be indefinitely reinvested in operations outside the U.S. As of September 25, 2010, U.S. income taxes have not been provided on a cumulative total of $12.3 billion of such earnings. The amount of unrecognized deferred tax liability related to these temporary differences is estimated to be approximately $4.0 billion.

As of September 25, 2010 and September 26, 2009, $30.8 billion and $17.4 billion, respectively, of the Company’s cash, cash equivalents and marketable securities were held by foreign subsidiaries and are generally based in U.S.
dollar-denominated holdings. Amounts held by foreign subsidiaries are generally subject to U.S. income taxation on repatriation to the U.S.

**Task 1.3 Compare how each firm utilized excess cash over the past three years**

Compare how each firm utilized excess cash (i.e. not core business uses such as capital expenditures or investment in working capital) over the past three years

Information to use:
- Statement of Cash Flows for each company
- From the Statement of Cash Flows, the following table can be constructed.

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<td>Apple</td>
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<tr>
<td>Share Repurchases</td>
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<td>Total Dividends</td>
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</tr>
<tr>
<td>Acquisition of Companies</td>
<td>$5.9B</td>
<td>$1.6B</td>
<td>$10.1B</td>
</tr>
</tbody>
</table>

Apple relied more heavily on repurchases of its own stock while Microsoft made more acquisitions. By using foreign cash to purchase a foreign company, Microsoft is able to complete the transaction at lower cost than if the firm used cash from the US. For example, Microsoft purchased Skype for $8.5B. It paid for Skype (a foreign company) with foreign earnings. If Skype had been a U.S. company, Microsoft would have first had to repatriate the funds, paid the repatriation tax and then made the purchase with the after tax funds. So “trapped cash” may be “liberated” through foreign acquisitions.

For additional discussion see this popular press report:
- “Will Microsoft’s $8.5 billion purchase of Skype be a wake up call for lawmakers on the need for corporate tax reform?”
- Skype can thank a large part of its big payday on the country’s corporate tax code and being organized outside of the U.S.

**Alternative Uses of Cash**

Cash generated by a firm can be used to make an acquisition, pay a dividend, buy back shares or repay debt. Academics and practitioners debate the relative merits of these uses of cash.

**Suggested Discussion: Apple under Jobs**

Steve Jobs, as former CEO of Apple, did not allow Apple to take on Debt or issue dividends. He did not repurchase shares. ([http://fortune.com/2010/03/19/why-steve-jobs-shouldnt-pay-you-a-dividend/](http://fortune.com/2010/03/19/why-steve-jobs-shouldnt-pay-you-a-dividend/))

Is that a problem? Wall Street purists would say it is. The argument goes something like this: Cash isn’t for show. It’s for investors. Companies have an obligation to either use it for growth drivers like acquisitions and equipment, or...
Liberating Trapped Cash: A Case Study of Trapped Cash at Apple and Microsoft

give it back to the shareholders. We put money into public companies to earn a higher return than we could get from the bank – so we’re understandably annoyed when Steve Jobs rolls it in rubber bands and tosses it in the safe.”

When Steve Jobs passed away (October 5, 2011), Tim Cook became CEO. Tim Cook changed Apple’s policy and began to issue debt and pay dividends. This can be seen by looking at the Cash Flow Statement.

| Task 1.4 Analyze the pros and cons of Icahn’s push for accelerated share repurchases |

Carl Icahn has been vocal in his call for increased share repurchases. Those who share his view note the rationale includes:

- A tax advantaged approach to providing return to shareholders. Consider a share repurchase versus a dividend. Dividend income is taxed immediately while share repurchases lead to capital gains which are taxed only when realized and may be subject to lower rates if long term in nature.
- If debt is issued (as was the case with Apple) to repurchase shares, the capital structure is changed. Apple had no debt and then issued debt to repurchase shares. The resulting change is capital structure should lower the firm’s overall cost of capital and thereby increase the value of the firm.
- There is some evidence that large cash balances lead to lower price to earnings multiples and can lead investors to undervalue the firm. If true, the low valuation would imply that share repurchases would provide a good investment opportunity for the firm. This is the primary argument made by Carl Icahn.
- Share repurchases indicate to the market management’s view that the shares are undervalued and this signaling may lead to reassessment by the market.

Disadvantages of share repurchase programs may include:

- Repurchasing of shares suggests the firm does not have adequate opportunities for investment.
- This action could be politically unpopular if the firm is viewed as “evading taxes.”
- An incentive for management to repurchase shares instead of paying dividends, investing or acquiring since stock options become more valuable as the number of shares falls and share price rises.
- Share repurchases boost EPS simply because the number of shares falls, which may benefit managers with compensation tied to EPS.
- There is some evidence that firms buy back shares when the price is high and reduce share buybacks when the price is low.

Additional sources of Information:

http://www.economist.com/news/business/21616968-companies-have-been-gobbling-up-their-own-shares-exceptional-rate-there-are-good-reasons
http://www.wsj.com/articles/SB10001424052970203824904577213891035614390
http://www.investopedia.com/articles/stocks/10/share-buybacks.asp

| Task 2.1 Compute the reasonable needs of Microsoft and Apple using the Bardahl formula |

A full description of the Bardahl Formula is available at https://www.irs.gov/irm/part4/irm_04-010-013-cont01.html#d0e4303. Here we break down the formula in a way to solve the task. The goal is to calculate the reasonable needs of the firm and compare those needs to the firm’s working capital. To do this we must determine the:
A. The operating expenses for the full year, including the cost of goods but excluding depreciation

<table>
<thead>
<tr>
<th>OPERATING EXPENSES FOR A FULL YEAR INCLUDING COST OF GOODS</th>
<th>AAPl</th>
<th>MSFT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-) LESS DEPRECIATION</td>
<td>$6,757</td>
<td>$2,967</td>
</tr>
<tr>
<td>(+) PLUS TAXES</td>
<td>$13,973</td>
<td>$5,289</td>
</tr>
<tr>
<td><strong>(a) OPERATING EXPENSES AS ADJUSTED</strong></td>
<td>$137,508</td>
<td>$48,089</td>
</tr>
</tbody>
</table>

B. The adjusted operating cycle in terms of percent of a year.

<table>
<thead>
<tr>
<th>INVENTORY CYCLE</th>
<th>AAPl</th>
<th>MSFT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. COST OF GOODS</td>
<td>$112,258</td>
<td>$17,530</td>
</tr>
<tr>
<td>B. AVERAGE INVENTORY</td>
<td>$1,937.50</td>
<td>$2,299.00</td>
</tr>
<tr>
<td>C. INVENTORY TURNOVER</td>
<td>0.02</td>
<td>0.13</td>
</tr>
<tr>
<td>(Turnover * 365)</td>
<td>6.30</td>
<td>47.87</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACCOUNTS RECEIVABLE CYCLE</th>
<th>AAPl</th>
<th>MSFT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. NET SALES FOR THE YEAR</td>
<td>$182,795</td>
<td>$73,723</td>
</tr>
<tr>
<td>B. AVERAGE ACCOUNTS RECEIVABLE</td>
<td>$15,281.00</td>
<td>$18,515.00</td>
</tr>
<tr>
<td>C. TURNOVER</td>
<td>0.08</td>
<td>0.25</td>
</tr>
<tr>
<td>(Turnover * 365)</td>
<td>30.51</td>
<td>91.67</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPERATING CYCLE</th>
<th>AAPl</th>
<th>MSFT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD A/R AND INVENTORY</td>
<td>36.81</td>
<td>139.54</td>
</tr>
<tr>
<td>(b) DIVIDE BY 365 = OPERATING CYCLE EXPRESSED AS PERCENTAGE OF YEAR</td>
<td>0.100855727</td>
<td>0.382289397</td>
</tr>
</tbody>
</table>

- Then, multiply (a) by (b) to get the amount of net liquid assets necessary to meet ordinary operating expenses.
- Compare the funds required or with the funds available. If funds available exceed funds required the excess is unreasonable accumulation.

<table>
<thead>
<tr>
<th>(a*b) Reasonable Needs = Adjusted Op. Exp *Operating Cycle</th>
<th>AAPl</th>
<th>MSFT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRENT ASSETS</td>
<td>$68,531</td>
<td>$114,246</td>
</tr>
<tr>
<td>CURRENT LIAB</td>
<td>$63,448</td>
<td>$45,625</td>
</tr>
<tr>
<td>WORKING CAPITAL</td>
<td>$5,083</td>
<td>$68,621</td>
</tr>
<tr>
<td>EXCESS (Working Cap – Reasonable Needs)</td>
<td>-$8,785.47</td>
<td>$50,237.09</td>
</tr>
</tbody>
</table>
**MSFT**

MSFT has accumulated earnings beyond their reasonable needs as demonstrated by the Bardahl formula. The accumulated earnings tax is asserted when a corporation has excess accumulated earnings that are invested in very liquid form (cash, accounts receivable, marketable securities) that can easily be converted into cash. Having the excess earnings is only part of the issue. The next question is “why” the excess. The corporation must provide a valid rationale for not distributing the excess cash.

Treasury Regulations 1.537-2 cites examples of what constitutes reasonable needs:
1. Bona fide expansion.
2. Acquire a business through purchase of stock or assets
3. Retirement of debt
4. Provide necessary working capital
5. Investments or loans to suppliers or customers
6. Provide for payment of reasonably anticipated product liability losses

Treasury Regulations §1.537-2 (c) further states,

“Accumulations of earnings and profits to meet any one of such objectives may indicate that the earnings and profits of a corporation are being accumulated beyond the reasonable needs of the business:
(1) Loans to shareholders, or the expenditure of funds of the corporation for the personal benefit of the shareholders;
(2) Loans having no reasonable relation to the conduct of the business made to relatives or friends of shareholders, or to other persons;
(3) Loans to another corporation, the business of which is not that of the taxpayer corporation, if the capital stock of such other corporation is owned, directly or indirectly, by the shareholder or shareholders of the taxpayer corporation and such shareholder or shareholders are in control of both corporations;
(4) Investments in properties, or securities which are unrelated to the activities of the business of the taxpayer corporation; or
(5) Retention of earnings and profits to provide against unrealistic hazards.”

In short, once we determine what the reasonable needs of the business are, anything in excess is considered unreasonable unless it can be documented. Any unreasonable accumulation is subject to a penalty tax of twenty per cent in accordance with Internal Revenue Code Section §531.

**AAPL**

Computationally, AAPL does not demonstrate excess earnings. The real question is, are the other long term assets truly long term. If the answer is yes, there are no excess earnings. If the long term assets can be reclassified as short term, then there is an accumulated earnings tax potential. It all comes down to intent and be able to demonstrate the intent.